

HQMC
11 Jun 91

ERRATUM

to

MCO 8420.9 of 16 May 91

MATERIEL FIELDING PLAN (MFP)
FOR THE SIMULATED LASER TARGET (SLT)
AN/GVT-1

1. Show the PCN distribution in the "DISTRIBUTION:" section of
the basic Order to read: "PCN 10210651300."

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DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, DC 20380-0001

MCO 8420.9
SST
16 May 91

MARINE CORPS ORDER 8420.9 W/ERRATUM

From: Commandant of the Marine Corps
To: Distribution List

Subj: MATERIEL FIELDING PLAN (MFP) FOR THE SIMULATED LASER
TARGET (SLT) AN/GVT-1

Encl: (1) Materiel Fielding Plan for the Simulated Laser
Target (SLT) AN/GVT-1


1. Purpose. To advise the Marine air wings, Marine air groups, and support commands of the fielding plan for a new aviation training device, the Simulated Laser Target (SLT) (AN/GVT-1). The fielding plan lists the training and audiovisual support centers (TAVSC's) and quantities each will receive; contains the requirements which the TAVSC's must accomplish prior to placing the equipment in use; and assigns the duties and responsibilities of the users, TAVSC personnel, and the CG (TE35TSL) MCCDC, Quantico, VA. This plan will remain in effect for the life cycle of the equipment and will be revised as necessary to update information.

2. Information. The SLT was developed and produced by Martin-Marietta along with Litton Data Systems as a laser identification set for the U.S. Air Force use in training with Pave Penny. Upon approval for Air Force use in January 1981, Headquarters Tactical Air Command purchased 64 SLT's which were fielded at various Air Force tactical ranges within the continental United States, Europe and the Pacific region. The Air Test and Evaluation Squadron 5 (VX-5) China Lake tested the SLT in March 1982, utilizing A-4, AV-8, and F/A-18 aircraft. Their test found the SLT to be an effective training device.

3. Action. The commanders of each organizational element concerned shall ensure implementation of the provisions of this Order.

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4. . This Order is not applicable to the
Marine Corps Reserve.


J. W. PEARSON III
By direction

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MATERIEL FIELDING PLAN

FOR THE SIMULATED LASER TARGET (SLT) AN/GVT-1

1. Introduction

a. Source of Requirement. Based on the objectives contained in the MLRP, MMRP, and the requirements identified in a Deputy Chief of Staff for Aviation memo APW-22/week of 1 December 1982, the former Deputy Chief of Staff for Training, now CG MCCDC (TE32), sponsored a PMC initiative for POM 85 to procure 30 simulated Laser Targets; 15 with FY85 funds and another 15 with FY86 funds. The 30 devices were placed on contract in FY87 by the PICA for the SLT, Warner-Robins ALC, Robins AFB, GA.

b. Points of Contact. All questions concerning the SLT shall be directed to these personnel in writing.

<u>TITLE</u>	<u>NAME</u>	<u>ADDRESS/CODE</u>	<u>TELEPHONE</u>
APM/PO	Maj R. S. Barton	CG MCRDAC/SST-330 Quantico, VA	AV 278-2546 (703)640-2546
T&E PO	Mr. J. Schirmer	CG MCCDC/TE35TSL Quantico, VA	AV 278-3707 (703)640-3707

c. Fielding Methodology

(1) General Fielding Plan. The SLT's have been fielded as depicted in appendix A.

(2) Method of Fielding. The SLT's were contracted by the PICA, Warner-Robins ALC, Robins AFB, GA 31093, to Litton-Data Systems for the former CMC (T), now CG MCCDC, on contract number F09603-87-G-0871. The SLT's were shipped directly to Marine Corps bases/stations, listed in appendix A, from the contractor's plant, Litton Lasers Systems, Orlando, FL. A schedule of events is contained in appendix B.

d. Replaced Systems Equipment. The SLT will not replace any current equipment, training device, or system in the Marine Corps.

2. System Description. The SLT is cushion mounted on a standard surveyor's tripod, which supports and levels the emitter assembly on various terrains. When the SLT is not in use or service, it will be stored in its transit case. The SLT comes with a control box that enables remote operation of the laser emitter, and a power cable assembly that connects the laser emitter assembly to the power source. The emitter consists of a laser transmitter, power supply, cooling and control panel sections.

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a. Administrative Information

(1) Nomenclature: Simulated Laser Target (SLT)
AN/GVT-1

(2) TAMCN: T2050

(3) ID Number: 08962A

(4) NSN: 1290-01-104-0251

(5) Unit of Issue: Each

(6) Unit Cost: \$64,259.00

b. Physical Characteristics

	<u>Operational Configuration</u>	<u>Storage/Shipping Configuration</u>
(1) <u>Length</u> :	19.5 in	32 in
(2) <u>Width</u> :	14.3 in	25 in
(3) <u>Height</u> :	17 in	20 in
(4) <u>Square</u> :	23.2 ft ²	66.8 ft ²
(5) <u>Cube</u> :	2.7 ft ³	9.3 ft ³
(6) <u>Weight</u> :	56.6 lbs	65 lbs
(7) <u>Power Requirement</u> :	+22 to 28 vdc, 10 amperes	

c. Operational Characteristics. The SLT is designed to provide pilots, utilizing aircraft equipped with laser search/track sets, to realistically perform operational training under a wide variety of locations and situations. The SLT is adaptable so it can be operated from mobile or fixed locations. The SLT is a portable, battery operated, Neodymium-YAG laser operating at 1064 nanometer. The laser output is omnidirectionally distributed through the diffusing lens and cover assembly to simulate reflections from a laser illuminated target. The SLT is categorized as a class 1 (safe) laser system with the diffusing assembly attached as a class 4 (hazardous) laser if operated with the diffuser assembly removed.

(1) The Navy Laser Safety Review Board has approved use of the SLT in the Navy and Marine Corps and established its classification as a class 1 laser system. The diffused laser emissions from the SLT are below the maximum permissible exposure

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limits for both the extended and point source criteria and it is safe for unlimited viewing under all conditions, including the use of magnifying optical devices. There are no requirements for laser protective goggles or for laser range restrictions.

(2) Without the installed diffuser cover and lens assembly, the SLT is a class 4 laser and strict control measures would then be necessary. The following laser safety parameters apply to operation of the laser without the diffuser assembly:

Nominal Ocular Hazard Distance (NOHD): 2.76 kilometers NOHD
(50 millimeter binoculars): 15.0 kilometers NOHD (8 centimeters optics): 21 kilometers Skin Hazard Distance: 5.56 meters
Optical Density for Unaided Viewing Protection: OD 5.44.

d. Associated Systems and Equipment. None.

3. Logistics Support

a. Maintenance Support. This program has no provisions for contractor support, interservice maintenance support agreement (ISSA), or other special maintenance at the organizational level. Local trained TAVSC personnel are responsible to assume custody and accountability of their assigned SLT's. The TAVSC personnel will place the SLT into service and maintain records of operational use and maintenance actions to include shipping to the depot level repair at WR-ALC. If at any time an SLT fails to function as outlined, the TAVSC will package the SLT and ship it to WR-ALC, Robins AFB, for repair. Contact CG MCCDC (TE35TSL) for funding information and accompany the SLT with a DD Form 1348-1 (6-Part) as the shipping document (appendix C).

(1) Organizational Level (1st Echelon and Limited 2d Echelon) Maintenance. Only qualified TAVSC personnel will initially place the SLT into operational service. The TAVSC will also perform periodic and preventive maintenance as indicated by TM 1290-12/1 which is currently available from CG MCLB, Albany. Trained operational personnel will be responsible for preventive maintenance when the SLT is signed out and being operationally employed. Preventive maintenance at the organizational level is limited in scope to include minor systems checks, corrosion control on battery cables and connections, and periodic purging of the system with dry nitrogen. All of these requirements are outlined in the technical manual. Under no conditions will SLT be operated without the lens and cover diffuser assembly installed, nor will the diffuser assembly be dismantled or removed from the SLT. An internal interlock is designed to prevent operation with the cover removed and an attached label warns against operating if the lens or cover are broken.

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(2) Depot Level (5th Echelon) Maintenance. Depot level maintenance will be coordinated by CG MCCDC and performed through the WR-ALC depot maintenance facility at Robins AFB, GA. This will be in accordance with TM 1290-1211. When depot level maintenance is required, the responsible TAVSC will ship the SLT to WR-ALC, Robins AFB, for repair. The responsible TAVSC will prepare DoD Single Line Item Release/Receipt Document, DD Form 1348-1 (6 Part) as a shipping document as shown in appendix C. Prior to shipment of the SLT, the TAVSC will notify CG MCCDC (TE35TSL) via message of intentions in order to coordinate the depot level maintenance. The information that is required on the message data included on subject message will include:

(a) SLT serial number (located on the laser emitter assembly 1A1).

(b) Transportation Control Number (TCN).

(c) Mode of transportation to WR-ALC, Robins AFB, and its estimated date of arrival.

(d) Anticipated date of shipment.

(e) Any amplifying information concerning the SLT.

This information will be used by CG MCCDC (TE35TSL) to provide funding for the depot level maintenance and will provide a MIPR number via message which will be entered into block DD of the DD Form 1348-1.

WARNING: UNDER NO CIRCUMSTANCE WILL THE SLT AN/GVT-1 BE DISASSEMBLED EXCEPT FOR AUTHORIZED DEPOT LEVEL REPAIR AT ROBINS AFB.

b. Contractor Support Requirements. There is no contractor support for the SLT.

c. Manpower, Personnel, and Training

(1) Training Requirements

(a) Initial Training (Placing the SLT into operational service). Initial training for Marine Corps personnel was conducted at MCB's Camp Lejeune and Camp Pendleton in July and August 1988. The training session lasted 6 hours and was conducted by a representative from WR-ALC, Robins AFB. TAVSC's at Camp Butler and MCAS Iwakuni will be receiving their initial training by a trained technician from the TAVSC MCAS, Kaneohe Bay, HI. This training was projected for September 1990.

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However, due to operational commitments this training has been delayed until resources are available. TAVSC personnel will also train the operational users of the SLT 1st echelon requirements as delineated in TM 1290-12/1.

(b) Follow-on Training. All follow-on training will be on an "as required" basis. Commands may request additional follow-on training to CG MCCDC (TE35TSL). All funding requirements must be born by the requesting command.

(2) Training Support Items. None.

d. Supply Support

(1) Consumable Materials Support. Only approved consumable materials or authorized substitutes will be used to perform preventive maintenance (PM) by trained TAVSC or trained operational personnel. Required consumable materials are listed in table 5-1, TM 1290-12/1.

(2) Retrofit and Modification Kits. CG MCCDC (TE35TSL), is designated the configuration manager for Marine Corps SLT assets and will coordinate with the PICA, WR-ALC, Robins AFB, as required, to provide modification kits and documentation for organizational level modifications. Depot level modifications will also be coordinated and authorized by CG MCCDC.

e. Support Equipment

(1) Special Tools. None.

(2) Common Tools. None.

(3) Special Purpose Test Equipment. None.

(4) General Purpose Test Equipment. None.

(5) Test Program Sets. None.

(6) Other Support Equipment. The purge adapter is the only unique equipment needed to place the SLT into operational service. The rest of the equipment listed below are required for operational use of the SLT. Description of this equipment is in TM 1290-12/1.

NOMENCLATURE

TAMCN

Battery Jumper Cable

*(locally manufactured)

Battery Holding Fixture

*(locally manufactured)

ENCLOSURE (1)

Batteries (2), +12 W-B-131 or equivalent
VCD, 80 amperes

Purge adaptor **8326372-01

NOTES: * The specifications used for these locally
manufactured items are contained in TM 1290-12/1,
pages 2-1 and 2-2.
** Purge adapters were delivered in July 90.

f. Technical Data and Configuration Requirements

(1) Publications. Each SLT will be accompanied by one copy of TM 1290-12/1 per SLT asset and 1 copy TM 1290-12P/2 per TAVSC. Notify CG MCCDC (TE35TSL) of any shortages in initial issue. TAVSC's will not ship TM's with any SLT returned for depot maintenance. Any recommended changes or modifications will be submitted to CG MCCDC (TE35TSL), as prescribed in section I, TM 1290-12/1. Initial issue of the joint technical data to support SLT fielding is the responsibility of CG MCCDC (TE35TSL). Future changes, revisions and replacement copies of TM's will be stocked by CG MCLB (876), Albany.

TM 1290-12/1	Operators Manual	PCN 18000412900
	Simulated Laser Target	
	AN/GVT-1	

TM 1290-12P/2	IPB, Illustrated Parts	PCN 18000413000
	Breakdown, simulated Laser	
	Target AN/GVT-1	

(2) Configuration Management Requirements. Configuration management is the responsibility of WR-ALC, Robins AFB. Recommendations for configuration changes or modifications will be sent to CG MCCDC (TE32TSL).

g. Computer Resources Support. None.

h. Facilities. None.

i. Packaging, Handling, Storage, and Transportation.

IMPORTANT: TAVSC's WILL RETAIN CONTROL OF ALL TECHNICAL MANUALS AND TRIPODS. DO NOT SHIP THESE WITH THE SLT TO ROBINS AFB.

j. Warranties. This procurement does not meet the warranty requirements outlined in MCO P4105.2.

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4. Actions Required to Place Equipment in Service

a. The gaining command shall:

(1) Report any possible defects noted on the SLT or its equipment to CG MCCDC (TE35TSL), Quantico, VA.

(2) Ensure maintenance actions are performed in accordance with TM 1290-12/1.

(3) Obtain the necessary consumable materials, support materials/equipment and the locally manufactured support as contained in TM 1290-12/1.

(4) Maintain trained personnel for PM and purge procedures on the SLT as required.

(5) Maintain equipment status and utilizations records on each SLT assigned to them.

(6) Notify CG MCCDC (TE35TSL) prior to shipping SLT's to WR-ALC, Robins AFB, for depot level repair.

(7) Submit utilization data to CG MCCDC (TE32TSL) as required by MCO P5290.1.

(8) Establish requirements for TM 1290-12/1 and TM 1290-12P/2 with CG MCLB (876), Albany, to facilitate issuance of future revisions once initial distribution has been completed by CG MCCDC (TE35TSL).

5. Special Instructions

a. Control. To control the disposition of the SLT assets, commands are requested to record serial numbers and submit these to CG MCCDC (TE35TSL), Quantico, VA.

b. Custodians. The TAVSC's that have been designated as SLT custodians are responsible for receiving, maintaining, and storing of their SLT assets.

ENCLOSURE (1)

LIST OF COMMANDS TO RECEIVE SLT'S

<u>Command</u>	<u>Qty</u>
CO, MCAS Yuma Attn: Trng & Audiovisual Support Center Yuma, AZ 85369-5001	4
CG, Marine Corps Air Ground Combat Center Attn: Trng & Audiovisual Support Center Twentynine Palms, CA 92278-5001	5
CG, MCB Camp Pendleton Attn: AC/S Ops & Trng, BT 6 Camp Pendleton, CA 92055-5001	2
CO, MCAS (H) New River Attn: Trng & Audiovisual Support Center Jacksonville, NC 28545-5001	2
CO, MCAS Iwakuni Attn: Trng & Audiovisual Support Center FPO Seattle 98764-5001	2
CO, MCAS Beaufort Attn: Trng & Audiovisual Support Center Beaufort, SC 29904-5001	2
CG, MCAS Cherry Point Attn: Trng & Audiovisual Support Center Cherry Point, NC 28533-5001	5
CG, MCAS El Toro Attn: Trng & Audiovisual Support Center Santa Ana, CA 92709-5001	2
CG, MCB Smedley D. Butler Attn: Trng & Audiovisual Support Center FPO Seattle 98773-5001	2
CO, MCAS Kaneohe Attn: Trng & Audiovisual Support Center Kaneohe Bay, HI 96863-5001	4

Appendix A to
ENCLOSURE (1)

SCHEDULE OF EVENTS

The schedule of major events concerning the acquisition and life cycle support of the SLT's are as follows:

<u>Event</u>	<u>Date(s)</u>
1. Contract awarded for the procurement of the SLT's.	Aug 87
2. SLT's delivered to designated TAVSC's.	Jul-Aug 89
3. TM 1290-12/1 initial distribution by the CG MCCDC.	Jul 88
4. Initial SLT training provided East Coast, West Coast and Kaneohe Bay TAVSC personnel.	Jul-Aug 88
5. TM 1290-12P/2 initial distribution.	Jan 89
6. SLT was certified for use by the DON Laser Safety Review Board (LSRB).	Apr 89
7. The CG MCRDAC (SST) delivery date for purge adapters.	Jun 90
8. TAVSC personnel MCB Smedley D. Butler and MCAS Iwakuni receive SLT training.	Sep 90
9. Warner Robins-ALC (MMMMIPB), Robins AFB, GA establishes organic depot level maintenance for SLT.	Sep 90
10. The CG MCCDC (TE32) assumes depot level maintenance funding responsibility for FY91.	Oct 90
11. The CG MCCDC (TE32) assumes responsibility of SLT management.	Oct 90
12. IOC	Oct 89
13. FOC	Jul 90

Appendix B to
ENCLOSURE (1)

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SHIPMENT FROM		SHIP TO		MARK FOR		PROJECT		TOTAL PRICE	
APPLICABLE DODDAD		FB2065		APPLICABLE		7R		06 4F	
APPLICABLE MARINE CORPS		WARNER-ROBINS ALC		APPLICABLE		PB2065		DOLLAR CTT	
APPLICABLE OR BASE		ROBINS AFB, GA 31093		APPLICABLE		C		DOLLAR CTT	
WAREHOUSE LOCATION		UNIT CODE		UNIT WEIGHT		UNIT PRICE		QUANTITY	
U		UFC		N M T C		FREIGHT RATE		QUANTITY	
P		K		I		M		D	
T		J		L		N		O	
W		A		B		P		Q	
X		C		D		E		F	
Y		G		H		I		J	
Z		K		L		M		N	
AA		O		P		Q		R	
AB		S		T		U		V	
AC		V		W		X		Y	
AD		X		Y		Z		AA	
AE		Y		Z		AA		AB	
AF		Z		AA		AB		AC	
AG		AA		AB		AC		AD	
AH		AB		AC		AD		AE	
AI		AC		AD		AE		AF	
AJ		AD		AE		AF		AG	
AK		AE		AF		AG		AH	
AL		AF		AG		AH		AI	
AM		AG		AH		AI		AJ	
AN		AH		AI		AJ		AK	
AO		AI		AJ		AK		AL	
AP		AJ		AK		AL		AM	
AQ		AK		AL		AM		AN	
AR		AL		AM		AN		AO	
AS		AM		AN		AO		AP	
AT		AN		AO		AP		AQ	
AU		AO		AP		AQ		AR	
AV		AP		AQ		AR		AS	
AW		AQ		AR		AS		AT	
AX		AR		AS		AT		AU	
AY		AS		AT		AU		AV	
AZ		AT		AU		AV		AW	
BA		AU		AV		AW		AX	
BB		AV		AW		AX		AY	
BC		AW		AX		AY		AZ	
BD		AX		AY		AZ		BA	
BE		AY		AZ		BA		BB	
BF		AZ		BA		BB		BC	
BG		BA		BB		BC		BD	
BH		BB		BC		BD		BE	
BI		BC		BD		BE		BF	
BJ		BD		BE		BF		BG	
BK		BE		BF		BG		BH	
BL		BF		BG		BH		BI	
BM		BG		BH		BI		BJ	
BN		BH		BI		BJ		BK	
BO		BI		BJ		BK		BL	
BP		BJ		BK		BL		BM	
BQ		BK		BL		BM		BN	
BR		BL		BM		BN		BO	
BS		BM		BN		BO		BP	
BT		BN		BO		BP		BQ	
BU		BO		BP		BQ		BR	
BV		BP		BQ		BR		BS	
BW		BQ		BR		BS		BT	
BX		BR		BS		BT		BU	
BY		BS		BT		BU		BV	
BZ		BT		BU		BV		BW	
CA		BU		BV		BW		BX	
CB		BV		BW		BX		BY	
CC		BW		BX		BY		BZ	
CD		BX		BY		BZ		CA	
CE		BY		BZ		CA		CB	
CF		BZ		CA		CB		CC	
CG</									

Appendix C to
ENCLOSURE (1)